

WHAT IS CLAIMED IS:

1. A destination guidance system utilizing a structure on premises of a building, comprising:

5 a structure information memory which stores structure information corresponding to information pertaining to the structure on the premises of the building, the structure information including a plurality of guide points on the premises of the building, and route data indicating moving routes that  
10 connect the plurality of guide points;

a guidance information memory which stores first guidance information including landmark data and landscape data concerning a plurality of approach and exit directions to and from each of the guide points;

15 an input unit configured to make a user input a desired place of departure and destination;

a recommended route generation unit configured to generate a recommended route, which is recommended upon movement from the place of departure to the destination,  
20 by selecting and connecting at least one of the route data stored in said structure information memory;

a presentation information generation unit configured to extract second guidance information concerning the plurality of the approach and exit  
25 directions to and from at least one guide point, which is present on the recommended route, from the first guidance information in said guidance information

memory, and to generate presentation information that contains the second guidance information; and

a presentation unit configured to present the presentation information.

5           2. A system according to claim 1, wherein said presentation information generation unit generates the presentation information to present third guidance information associated with movement across different floors, which are present on the recommended route, and  
10          fourth guidance information associated with movement on a single floor in different formats.

          3. A system according to claim 1, wherein the presentation information includes information that pertains to the recommended route, and information that  
15          pertains to a moving direction and a current position.

          4. A system according to claim 3 and utilizing current position data from a position providing device provided on the premises of the building, wherein said presentation unit switches the present information to  
20          the guidance information or the information that pertains to the recommended route at a predetermined guide point of the presentation information in response to the current position data, or a switching input from a user.

25          5. A system according to claim 1, wherein said recommended route generation unit generates the recommended route on the basis of a time condition or a

guide point where the user wants to pass.

6. A railway station destination guidance system utilizing a structure on the premises of a railway station, comprising:

- 5           a structure information memory which stores structure information corresponding to information pertaining to the structure on the premises of the railway station, the structure information including a plurality of guide points on the premises of the
- 10          railway station, and route data indicating moving routes that connect the plurality of guide points;
- a guidance information memory which stores guidance information, the guidance information including landmark data and landscape data which
- 15          concerns a plurality of approach and exit directions to and from each of the guide points;
- an input unit configured to make a user input a desired place of departure and destination;
- a recommended route generation unit configured to
- 20          generate a recommended route, which is recommended upon movement from the place of departure to the destination, by selecting and connecting the route data stored in said structure information memory;
- a presentation information generation unit
- 25          configured to extract second guidance information concerning the plurality of the approach and exit directions to and from at least one of the guide points,

which is present on the recommended route, from the first guidance information in said guidance information memory, and to generate presentation information that contains the second guidance information; and

5           a presentation unit configured to present the presentation information.

7. A system according to claim 6, wherein said recommended route generation unit generates the recommended route on the basis of at least one of  
10       transfer information, a transfer time, a moving environment, and a facility on the premises of the railway station that the user wants to use, which are input by said input unit.

8. A system according to claim 7, wherein the  
15       presentation information includes at least one of the transfer information, third guidance information pertaining to the transfer time, fourth guidance information pertaining to the moving environment, fifth  
20       guidance information pertaining to the facility on the premises of the railway station that the user wants to use, information pertaining to the recommended route, and information pertaining to a moving direction and a current position.

9. A system according to claim 7, further  
25       comprising a moving time calculator which calculate a time required to move along the recommended route.

10. A server apparatus which generates information

pertaining to guidance on the premises of a building and sends the information to a user terminal and utilizes a structure on the premises of a building, comprising:

5           a communication device configured to communicate with the user terminal;

          a structure information memory which stores structure information corresponding to information pertaining to the structure on the premises of the  
10       building, the structure information including a plurality of guide points on the premises of the building and route data indicating moving routes that connect the plurality of guide points;

          a guidance information memory which stores first  
15       guidance information, which includes landmark data and landscape data concerning a plurality of approach and exit directions to and from each of the guide points;

          a recommended route generation unit configured to generate a recommended route, which is recommended upon  
20       movement from a place of departure to a destination input from the user terminal, by selecting and connecting at least one of the route data stored in said structure information memory; and

          a presentation information generation unit  
25       configured to extract second guidance information concerning the plurality of the approach and exit directions to and from at least one of the guide point,

which is present on the recommended route, from the first guidance information in said guidance information memory, and to generate presentation information which contains the second guidance information and is sent to the user terminal via said communication device.

11. An apparatus according to claim 10, wherein the presentation information includes information that pertains to the recommended route, and information that pertains to a moving direction and a current position.

12. An apparatus according to claim 10, wherein said recommended route generation unit comprises:

a route search unit configured to search for a plurality of moving routes upon movement from the place of departure to the destination;

a cost calculator which calculates costs for the respective moving routes by scoring the number of turning points and the number of guide points included in each of the plurality of moving routes and obtain a cost calculator result; and

a selection unit configured to select the recommended route from the plurality of moving routes on the basis of the cost calculation result.

13. An apparatus according to claim 10, wherein said presentation information generation unit extracts, from said guidance information memory, third guidance information associated with only a guide point designated in advance, of the guide points present on

the recommended route.

14. An apparatus according to claim 10 and  
utilizing a position information transmission device  
provided on the premises of the building, wherein said  
communication device receives, from the user terminal,  
5 position information that the user terminal has  
received from the position information transmission  
device provided on the premises of the building,

said apparatus further comprises a checking unit  
10 configured to check based on the position information  
received by said communication device whether the user  
is moving along the recommended route or not, and

said presentation unit presents presentation  
information which includes third guidance information  
15 pertaining to the next guide point when said checking  
unit determines that the user is moving along the  
recommended route, and presents presentation  
information which includes fourth guidance information  
pertaining to a nearby guide point on the recommended  
20 route when said checking unit determines that the user  
is not moving along the recommended route.

15. A user terminal communicating with a server  
apparatus which generates information pertaining to  
guidance on a premises of a building, comprising:

25 an input unit configured to input a desired place  
of departure and destination on the premises of the  
building;

a communication device configured to send the place of departure and destination to the server apparatus, and to receive the information pertaining to guidance on the premises of the building from the server apparatus; and

a presentation unit configured to present the information pertaining to guidance on the premises of the building.

16. A terminal according to claim 15 and communicating with at least one of a plurality of position information transmission devices provided on the premises of the building, wherein said communication device receives position information from at least one of the plurality of position information transmission devices,

said terminal further includes a checking unit configured to check based on the received position information whether a user is moving along a recommended route or not, and

said presentation unit presents presentation information which includes guidance information pertaining to the next guide point when said checking unit determines that the user is moving along the recommended route, and presents presentation information which includes guidance information pertaining to a nearby guide point on the recommended route when said checking unit determines that the user



is not moving along the recommended route.

17. A terminal according to claim 16, further comprising a communication controller which controls said communication unit to receive the position  
5 information from only the predetermined position information transmission device.

18. A destination guidance method comprising:  
storing structure information corresponding to information pertaining to a structure on the premises  
10 of a building, the structure information including a plurality of guide points on the premises of the building, and route data indicating moving routes that connect the plurality of guide points in a guidance information memory;  
15 storing first guidance information, which includes landmark data and landscape data concerning a plurality of approach and exit directions to and from each of the guide points;  
making a user input a desired place of departure  
20 and destination;  
generating a recommended route, which is recommended upon movement from the place of departure to the destination, by selecting and connecting at least one of the stored route data;  
25 extracting second guidance information concerning the plurality of the approach and exit directions to and from at least one of the guide point, which is

present on the recommended route, from the guidance information in the guidance information memory;

generating presentation information that contains the guidance information; and

5 presenting the presentation information.

19. A method according to claim 18, wherein the presentation information contains information that pertains to the recommended route, and information that pertains to a moving direction and a current position.

10 20. A computer readable memory storing a guidance program, the guidance program comprising:

first store means for causing a computer to store structure information corresponding to information pertaining to a structure on the premises of a building, the structure information including a plurality of guide points on the premises of the building and route data indicating moving routes that connect the plurality of guide points;

15 second store means for causing a computer to store guidance information, which includes landmark data and landscape data for a plurality of approach and exit directions to and from each of the guide points in a guidance information memory;

20 first generation means for causing a computer to generate a recommended route, which is recommended upon movement from a place of departure to a destination which are input from a user terminal, by selecting and

connecting at least one of the stored route data;

second means for causing a computer to extract guidance information concerning the plurality of the approach and exit directions to and from at least one  
5 of the guide points, which is present on the recommended route, from said guidance information memory, and for generating presentation information that contains the guidance information; and

means for causing a computer to send the  
10 presentation information to the user terminal via a communication device.

21. A medium according to claim 20, wherein the presentation information contains information that pertains to the recommended route, and information that  
15 pertains to a moving direction and a current position.

22. A destination guidance data acquisition system comprising:

a presentation unit configured to present a structural drawing on the premises of a building;

20 a structure information generation unit configured to generate structure information by designating a plurality of guide points on the premises of the building and route data indicating moving routes that connect the plurality of guide points on the structural  
25 drawing on the premises of the building;

a structure information memory which stores the structure information;

a guidance information generation unit configured to generate guidance information by inputting landmark data or landscape data, which serve as landmarks in a plurality of line-of-sight directions upon approaching or existing from each of the plurality of guide points of the structure information; and

a guidance information memory which stores the guide information for each of the guide points.

23. A system according to claim 22, further comprising a compiler which compiles the structure information or the guidance information.

24. A destination guidance data acquisition terminal which acquires information pertaining to guidance on the premises of a building, and sends the acquired information to a server, comprising:

a presentation unit configured to present a structural drawing of the premises of the building;

a structure information generation unit configured to generate structure information by designating a plurality of guide points on the premises of the building and route data indicating moving routes that connect the plurality of guide points on the presented structural drawing of the premises of the building;

a guidance information generation unit configured to generate guidance information by inputting landmark data or landscape data, which serve as landmarks in a plurality of line-of-sight directions upon approaching

or existing from each of the plurality of guide points of the structure information; and

a communication device configured to send the structure information and the guidance information for each guide point to the server.

25. A terminal according to claim 24, further comprising a compiler which compiles the structure information or the guidance information.

26. A terminal according to claim 24, further comprising a position information reception unit configured to receive position information from a position information providing device provided on the premises of the building, and

wherein said guidance information generation unit selects a guide point for which guidance information is to be generated, on the basis of the position information received by said position information reception section, and generates guidance information for the selected guide point.

27. A destination guidance data acquisition server which acquires data pertaining to guidance on the premises of a building in accordance with an input from a destination guidance data acquisition terminal, comprising:

a communication device configured to communicate with the destination guidance data acquisition terminal;

a structure information memory which stores structure information corresponding to information received by said communication device , the structure information being generated by designating a plurality of guide points, and route data indicating moving routes that connect the plurality of guide points on a structural drawing of the premises of the building; and

a guidance information memory which stores, for each guide point, guidance information corresponding to information received by said communication device, the guidance information being generated by inputting landmark data or landscape data which serve as landmarks in a plurality of line-of-sight directions upon approaching or existing from each of the plurality of guide points of the structure information.

28. A server according to claim 27, further comprising:

an input unit configured to input the structural drawing of the premises of the building; and

a structure information generation unit configured to generate structure information by setting a plurality of guide points, and route data indicating moving routes that connect the plurality of guide points on the input structural drawing.

29. A server according to claim 27, further comprising a guidance information assist unit configured to generate the guidance information

corresponding to movement of a viewpoint along the route data by interpolating the input landmark data or landscape data.

30. A destination guidance data acquisition method comprising:

generating structure information by designating a plurality of guide points on the premises of the building and route data indicating moving routes that connect the plurality of guide points on a structural drawing of the premises of a building;

storing the structure information;

generating guidance information by inputting landmark data or landscape data, which serve as landmarks in a plurality of line-of-sight directions upon approaching or existing from each of the plurality of guide points of the structure information;

storing the guide information for each guide point; and

presenting at least one of the structural drawing of the premises of the building, the structure information, and the guidance information.

31. A method according to claim 30, further comprising compiling the structure information or the guidance information.

32. A computer readable memory comprising:

means for causing a computer to communicate with a destination guidance data acquisition terminal;

first storage means for causing a computer to store structure information, which is information received via the communication, and is generated by designating a plurality of guide points, and route data indicating moving routes that connect the plurality of guide points on a structural drawing on the premises of the building; and

second storage means for causing a computer to store, for each guide point, guidance information which is information received via the communication, and is generated by inputting landmark data or landscape data which serve as landmarks in a plurality of line-of-sight directions upon approaching or existing from each of the plurality of guide points of the structure information.

33. A computer readable memory storing a guidance program, the guidance program comprising:

means for causing a computer to present a structural drawing of premises of a building;

first generation means for causing a computer to generate structure information by designating a plurality of guide points on the premises of the building and route data indicating moving routes that connect the plurality of guide points on the presented structural drawing of the premises of the building;

second generation means for causing a computer to generate guidance information by inputting landmark



data or landscape data, which serve as landmarks in a plurality of line-of-sight directions upon approaching or existing from each of the plurality of guide points of the structure information; and

5           means for causing a computer to send the structure information and the guidance information for each guide point to the server.

34. A memory according to claim 33, further comprising:

10           means for causing a computer to receive position information from a position information providing device provided on the premises of the building; and

            means for causing a computer to select a guide point for which guidance information is to be generated,  
15           on the basis of the received position information, and generate guidance information for the selected guide point.

35. A memory according to claim 33, the guidance program further comprising: means for causing a  
20           computer to compile the structure information or the guidance information.